

Department of Elementary and Secondary Education
Missouri Strategic Initiative for Economic Growth
Investing in an Educated Workforce

Dr. Chris Nicastro, Missouri Commissioner of Education
October 15, 2010

A. Identify the need or problem that negatively affects Missouri's economy

On many national measures Missouri's educational performance matches our geography—in the middle. If Missouri is not among top performers nationally and internationally, we simply cannot compete. For the first time in our nation's history, our youth will be challenged by the youth of other countries now competing for important positions in a workplace that is no longer defined by our borders, but is worldwide.

Effective strategies to entice new businesses or convince existing businesses to expand will need to be coupled with innovative strategies to improve the skills and knowledge base of Missouri's future workforce.

The surest way to build capacity of our students toward better performance is to build the capacity of those who teach them. In other words, better teachers = better student achievement = a better workforce. Raising the collective ability levels of Missouri students will require an increase in the collective ability levels of Missouri's teachers and leaders. The quality of an educational system cannot exceed the quality of its teachers ¹

B. Indicate the significance of the problem/opportunity or what would occur if the problem/opportunity is not addressed

A community's quality of life is typically determined by indicators such as education, employment, energy, environment, health, human rights, income, infrastructure, national security, public safety, recreation and shelter. There is significant interdependence between these indicators but a central component is education.

A society with average student performance translates into a workforce with a very general knowledge-base and skill-set that result in a mediocre quality of life. Missouri's citizens do not want that for themselves or for their families. A mediocre quality of life is categorized by an increasing population of citizens with a limited contribution of knowledge and skills and an increasing dependence on government assistance. Attracting new businesses or encouraging existing ones to expand would be difficult.

C. Identify the data that validates the extent of the problem/need/opportunity

While the number of high school graduates in Missouri has steadily increased between 2005 and 2009 from 58,040 to 61,761, other numbers just released in October 2010 tell another side of the story.

- Between 2005-2009: the number of dropouts in Missouri grew from 9,730 to 12,323 representing an increase in grades 9-12 of 3.5% to over 4.0%
 - Or, 16% of students drop out between their 13th and 18th birthday
 - Urban areas have a much higher percentage

- Between 2005-2009, the number of graduates entering a four-year college/university has declined from 38.2% to 37.1%
- Between 2005-2009, the number of graduates entering a two-year college or university declined from 26.4% to 26.2%
- Between 2005-2009, those entering the workforce declined from 19.8% to 18.8%

Data also indicate that:

- Over the next two years, Missouri's economy will need to fill over 155,000 job openings with 13% of the jobs due to growth and the other 87% due to replacements
- Fueled by the growth in healthcare and postsecondary education occupations, careers requiring a Master's degree (2.0%) or beyond (4.0%) are expected to experience the highest growth rate in the next two years
- Occupations in the following three education levels will experience the greatest increase in earnings from entry wages to average wages
 - Bachelor's or higher degree plus work experience (+\$32,800)
 - Doctoral degree (+\$25,600)
 - First professional degree (+\$52,600) ²

D. Identify best practices related to this issue

The highest performing school systems in the world (Singapore, Finland, Norway) all get the best people to become teachers. They develop these people into effective instructors, knowing the only way to improve student outcomes is to improve instruction. Finally, they put in place systems and targeted support to ensure that every child benefits from excellent instruction

Denmark, another high performing system, allocates nearly 7% of their Gross Domestic Product into public investment in education, making it among the highest in the world. For that investment, Denmark has among the highest performing students in the world. However, blind investment without purpose and with no connection to specific, measureable student outcomes is wasted money. High performance occurs when investment is linked to specific student outcomes and includes a mechanism for measurement to ensure that the desired outcomes are achieved. ³

E. Develop an outline of the proposed solutions or actions to address the need or problem

To improve Missouri's quality of life, it is necessary to improve its workforce. To accomplish this, it is necessary to improve the capacity of its teachers and leaders, enabling them to improve student outcomes and significantly impact the quality of its graduates. The Department of Elementary and Secondary Education has established three goals to accomplish this:

- Goal #1: Missouri public education will rank in the top ten of national and international measures of performance.
- Goal #2: Missouri will provide high quality early educational opportunities to all young children and their families.
- Goal #3: Missouri will recruit, prepare, retain and support effective teachers and leaders.

The Department's third goal acknowledges that the only way to improve student outcomes is to improve instruction. The Council of Chief State School Officers recognizes this when it suggests that strategies for transforming education must include making the following three areas into priorities:

- Standards for Learning, Teaching and Leading
 - National standards that are aligned and operational and supported by infrastructure changes needed to support implementation

- Teacher and Leader Professional Growth and Support
 - Educator effectiveness improved through collaborative, job-embedded growth opportunities
- Evaluating Teaching and Leading
 - New models and multiple measures for determining effectiveness ⁴

Specific Department objectives for this goal include efforts to ensure that educators are placed in the positions for which they are qualified. Data indicates shortage areas in Missouri where students are not receiving instruction from a qualified teacher. Currently, not all districts are successful at ensuring that disadvantaged children get the most effective teachers.

Beginning first with recruitment and selection, the Department and the State will unite in a joint recruitment/marketing campaign to elevate the stature of teaching and encourage those with the greatest potential to consider it as a profession. Lawmakers, doctors, engineers, scientists, lawyers and other professionals will create opportunities to share their respect for teachers and, in turn, encourage students to become educators. Retired professionals should consider education as a second career or volunteer to assist in public schools.

Improving educator effectiveness requires high-quality preparation with a robust clinical experience followed by induction into the profession with significant support from mentors and coaches. On-going learning and a totally responsive support system, including community agencies, must be available to educators as they work to meet the needs of their particular student population. Evaluation strategies and models must be used to gather accurate data to inform the process from preparation through successful practice.

More important than having qualified teachers is being able to assess whether they are effective. Standards-based instruments for measuring educator effectiveness must be developed and the data generated be used to inform practice resulting in better education for children, be integrated into preparation institutions and professional organizations, and guide the support systems.

As data from high performing systems around the world suggests, recruiting and selecting the right people, developing them into excellent instructors, and crafting systems that ensure that all students learn is critical to improving student outcomes. Necessary to accomplish this is legislation that establishes comprehensive public policy regarding educator quality effectiveness, accountability and the necessary investment to carry it to full implementation.

F. Indicate the resources necessary to implement the actions

The real challenge lies in the lack of capacity of teachers and leaders to make instruction more effective by following the best practices that have been proven to work. Investment is required to build this capacity. Missouri educators (principals and teachers) need to be provided time, funds and professional development to learn to use data in directing instruction and, if the data indicates, learning or re-learning necessary skills/content to provide the instruction students need. Accurate data that reveals a change in adult practice resulting in an increase in student achievement must be the only acceptable outcome. An investment in education saves the state of Missouri from bearing the cost of negative consequences associated with a sub-standard quality of life.

G. Indicate the likely immediate and long-range benefits of the proposed actions/solutions, and the method to measure performance

An immediate benefit would be a student who learns more today than yesterday as a result of a teacher teaching better today than they did yesterday. Higher student performance would result in more high

school graduates and fewer dropouts, more students who enter postsecondary education and not require remediation, and more students completing college and graduating. Increased student efficacy would lead to more students taking increasingly challenging classes like upper level mathematics and science.

Long-range benefits would include a highly knowledgeable and skilled workforce capable of supporting new and expanded business opportunities. An overall improvement in the economic health of the state would be the result of expanded business. All of this would combine to create overall improvement in Missouri's quality of life.

¹ McKinsey & Company, Sept. 2007 *How the World's Best-Performing School Systems Come out on Top*

² OSEDA Office of Social and Economic Analysis. *MERIC Short-term Occupational Projections and MERIC Occupational Employment & Wage Survey*(http://www.missourieconomy.org/pdfs/mo_st_education_training.pdf)

³ *ibid*

⁴ CCSSO Council of Chief State School Officers. *State Consortium on Educator Effectiveness from the Council of Chief State School Officers*